L Number	Hits	Search Text	DB	Time stamp
1	6990	(nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/04/09 08:46
2	89446	((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/04/09 08:46
3	2235	((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/04/09 08:48
4	4237	((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/04/09 08:48
5	1535	(((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/04/09 08:50
6	94	((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/04/09 08:49
7	15	(((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) and ((impact$4 or actual or land$4) near3 position$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/04/09 08:54

| 8 | 79 | (((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) not ((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) and ((impact$4 or actual or land$4) near3 position$1)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2004/04/09 08:55 |
| 10 | 0 | ((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) not ((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) and ((impact$4 or actual or land$4) near3 position$1))) not speed$1 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2004/04/09 08:56 |

| 9 | 29 | (((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) not (((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) and ((impact$4 or actual or land$4) near3 position$1))) not displac$4 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2004/04/09 09:08 |

| 11 | 50 | (((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) not ((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) and ((impact$4 or actual or land$4) near3 position$1))) not (((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) not ((((((nozzle$1 or orifice$1) and (quantit$4 or amount) and (speed$1) and (piezoelectric$1 or piezo-electric$1 or transducer$1) and voltage$1) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1))) and ((quantit$4 or volume$1 or amount$1) same (discharg$4 or drop$6 or eject$4))) and (((nozzle$1 or orifice$1) or (piezoelectric$1 or piezo-electric$1 or transducer$1)) same (group$1 or block$1) same (volatge$1 or magnitude$1 or amplitude$1))) and ((impact$4 or actual or land$4) near3 position$1))) not displac$4) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2004/04/09 09:08 |